

REMARKS/ARGUMENTS

This Amendment is submitted in reply to the Office Action dated February 13, 2006, and within the three month period for reply extending to May 13, 2006.

Claims 1, 5-6, 10, 12-14, 16-18, 20, 22-23 are currently amended.

5 Claim 19 is cancelled.

Claims 1-18 and 20-28 remain pending.

Allowable Subject Matter

The Applicants acknowledge the Office's indication that claims 6, 10, 11, 13, 16, 10 23, and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The Applicants further acknowledge the Office's indication that claims 14-15, 17-18, and 28 are also allowable due to their dependence upon the indicated allowable claims 13, 16, and 27.

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Rejections under 35 U.S.C. 102

Claims 1-3, 12, 20-22, and 24-26 were rejected under 35 U.S.C. 102(e) as being anticipated by Sindhu et al. ("Sindhu" hereafter) (U.S. Patent No. 6,493,347). These rejections are traversed.

20 Claim 1 has been amended to clarify that the data stream of each input is to be distributed across each of the set of memory banks in accordance with a set of single bit control signals. Also, claim 1 has been amended to include a rotating selector for generating the set of single bit control signals. Amended claim 1 further distinguishes the rotating selector as causing a different one of the set of single bit control signals to have a 25 unique state in a given clock cycle.

With regard to amended claim 1, Sindhu does not teach or suggest a rotating selector for generating a set of single bit control signals to be used for controlling distribution of the input data stream across each of the set of memory banks. More particularly, Sindhu does not teach or suggest a rotating selector defined to cause a 5 different one of a set of single bit control signals to have a unique state in a given clock cycle.

For a claim to be anticipated under 35 U.S.C. 102, each and every feature of the claim must be taught by a single cited art reference. In accordance with the foregoing, Sindhu does not teach each and every feature of amended claim 1, as required to support 10 a rejection under 35 U.S.C. 102. Therefore, the Applicants submit that claim 1 is patentable over Sindhu. Additionally, due to their dependence on claim 1, each of claims 2-11 includes all of the features recited in claim 1 and is patentable over Sindhu for at least the reasons provided for claim 1. The Office is respectfully requested to withdraw the rejections of currently pending claims 1-3 under 35 U.S.C. 102.

15 Claim 12 has been amended to distinguish the first ratcheting distributor as including a rotating selector for generating a set of single bit control signals, such that a different one of the set of single bit control signals has a unique state in a given clock cycle. Amended claim 12 further clarifies that the first ratcheting distributor is defined to distribute the data stream received by either of the number of inputs across the number of 20 memory banks in accordance with the set of single bit control signals generated by the rotating selector.

With regard to amended claim 12, Sindhu does not teach or suggest a ratcheting distributor that includes a rotating selector for generating a set of single bit control signals. Moreover, Sindhu is silent with regard to a set of single bit control signals 25 generated such that a different one of the set of single bit control signals has a unique

state in a given clock cycle. Additionally, Sindhu does not teach or suggest a ratcheting distributor that is defined to distribute a data stream across a number of memory banks in accordance with a set of single bit control signals generated by a rotating selector.

For a claim to be anticipated under 35 U.S.C. 102, each and every feature of the
5 claim must be taught by a single cited art reference. In accordance with the foregoing, Sindhu does not teach each and every feature of amended claim 12, as required to support a rejection under 35 U.S.C. 102. Therefore, the Applicants submit that claim 12 is patentable over Sindhu. Additionally, due to their dependence on claim 12, each of claims
10 13-18 includes all of the features recited in claim 12 and is patentable over Sindhu for at least the reasons provided for claim 12. The Office is respectfully requested to withdraw the rejection of currently pending claim 12 under 35 U.S.C. 102.

Claim 20 has been amended to clarify that the data stream is distributed across the number of memory banks in accordance with a set of single bit control signals. Amended claim 20 further recites an operation for generating the set of single bit control signals
15 such that a different one of the set of single bit control signals has a unique state in a given clock cycle, wherein the unique state indicates which data stream is to have a portion of itself stored in a particular memory bank in the given clock cycle.

With regard to amended claim 20, Sindhu does not teach or suggest distribution of a data stream across a number of memory banks in accordance with a set of single bit
20 control signals. Additionally, Sindhu does not teach or suggest generation of the above-mentioned set of single bit control signals such that a different one of the set of single bit control signals has a unique state in a given clock cycle. Furthermore, Sindhu does not teach that the unique state indicates which data stream is to have a portion of itself stored in a particular memory bank in the given clock cycle.

For a claim to be anticipated under 35 U.S.C. 102, each and every feature of the claim must be taught by a single cited art reference. In accordance with the foregoing, Sindhu does not teach each and every feature of amended claim 20, as required to support a rejection under 35 U.S.C. 102. Therefore, the Applicants submit that claim 20 is 5 patentable over Sindhu. Additionally, due to their dependence on claim 20, each of claims 21-28 includes all of the features recited in claim 20 and is patentable over Sindhu for at least the reasons provided for claim 20. The Office is respectfully requested to withdraw the rejections of currently pending claims 20-22 and 24-26 under 35 U.S.C. 102.

10 **Rejections under 35 U.S.C. 103**

Claims 4-5 and 7-9 were rejected under 35 U.S.C. 103(a) as being unpatentable over Sindhu. These rejections are traversed.

Due to their dependence on claim 1, each of claims 4-5 and 7-9 includes all of the features recited in claim 1 and is patentable over Sindhu for at least the reasons provided 15 above for claim 1. Therefore, the Applicants submit that claims 4-5 and 7-9 are patentable over Sindhu. The Office is respectfully requested to withdraw the rejections of currently pending claims 4-5 and 7-9 under 35 U.S.C. 103.

The Applicants submit that all of the pending claims are in condition for allowance. Therefore, a Notice of Allowance is requested. If the Examiner has any questions concerning the present Amendment, the Examiner is requested to contact the undersigned at (408) 774-6914. If any additional fees are due in connection with filing 5 this Amendment, the Commissioner is authorized to charge Deposit Account No. 50-0805 (Order No. SUNMP232). A duplicate copy of the transmittal is enclosed for this purpose.

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Respectfully submitted,
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